

CLAIMS

Claim 1 (currently amended) Improved sealing cap in particular for a collector tube in an air-conditioning unit for vehicles suitable for being axially inserted in a cylindrical portion (11) at an end of said collector tube, ~~characterised in that it comprises~~ comprising at least two ~~moulded~~ molded elements able to be coupled (12, 13, 22), a first molded element (12) of said at least two molded elements having an internal recess (32) with at least one transversal wall (33), protruding at one end suitable for receiving an element that can be coupled, and being equipped with a portion (16) with the same diameter as the collector tube and at least one portion with a smaller diameter (17, 21), said at least one portion with a smaller diameter (17, 21) extends in a further portion (18, 23) of smaller diameter suitable for stably receiving a second element (13, 22) to define at least one seat (15, 150) for a sealing ring (14), which is realised with the coupling of when said at least two elements are coupled, said portion with a smaller diameter (17, 21) than said portion (16) with the same diameter as the collector defining a base of said seat (15, 150), a side surface (19, 28) of said second element (13, 22) and a side surface (20, 29) of said portion with the same diameter as the collector (16) respectively defining sides of said seat (15, 150), said cap including a third element (22) adapted to be coupled to said first element (12), said first element (12) being equipped with a further portion (17, 21) with a smaller diameter suitable for defining a second further seat (15, 150) for a sealing ring (14) upon stable coupling of said first and third elements (12, 22), said further portion with a smaller diameter (17, 21) defining a base of said second seat (150), a side surface (19, 28) of said third element (13, 22) and a side surface (20, 29) of said portion with the same diameter as the collector (16) respectively defining sides of said further seat (15, 150).

Claims 2-4 (canceled)

Claim 5 (currently amended) ~~Cap according to claim 4, characterised in that~~ Improved sealing cap in particular for a collector tube in an air-conditioning unit for vehicles suitable for being axially inserted in a cylindrical portion (11) at an end of said collector tube, comprising at least two molded elements able to be coupled (12, 13, 22), a first molded element (12) of said at least two molded elements having an internal recess (32) with at least one transversal wall

(33), protruding at one end suitable for receiving an element that can be coupled, and being equipped with a portion (16) with the same diameter as the collector tube and at least one portion with a smaller diameter (17, 21), said at least one portion with a smaller diameter (17, 21) extends in a further portion (18, 23) of smaller diameter suitable for stably receiving a second element (13, 22) to define at least one seat (15, 150) for a sealing ring (14) when said at least two elements are coupled, said portion with a smaller diameter (17, 21) than said portion (16) with the same diameter as the collector defining a base of said seat (15, 150), a side surface (19, 28) of said second element (13, 22) and a side surface (20, 29) of said portion with the same diameter as the collector (16) respectively defining sides of said seat (15, 150), said cap including a third element (22) adapted to be coupled to said first element (12), said first element (12) being equipped with a further portion (17, 21) with a smaller diameter suitable for defining a second further seat (15, 150) for a sealing ring (14) upon stable coupling of said first and third elements (12, 22), said further portion with a smaller diameter (17, 21) defining a base of said second seat (150), a side surface (19, 28) of said third element (13, 22) and a side surface (20, 29) of said portion with the same diameter as the collector (16) respectively defining sides of said further seat (15, 150), wherein said at least one portion with a smaller diameter (17, 21) extends in a further portion (18, 23) having attachment means, and said attachment means comprise a recessed throat (18) suitable for receiving an element that can be coupled (13) with pressure.

Claim 6 (currently amended) Cap according to claim ~~[[4]]~~ 5, ~~characterised in that~~ wherein said attachment means comprises a tubular body (23) carrying at least one attachment tooth (24) on the outside for engagement with at least one matching element (27).

Claim 7 (currently amended) Cap according to claim 6, ~~characterised in that~~ wherein said ~~third moulded~~ molded element (22) which can be coupled with said first element (12) comprises an annular portion with the same diameter as the collector (25) and at least one hollow tubular portion (26), suitable for receiving said tubular ~~part~~ body (23) of the first element (27) matching said at least one attachment tooth (24) suitable for snap engaging.

Claim 8 (canceled)

Claim 9 (currently amended) Cap according to claim [[1]] 5, ~~characterised in that~~ wherein said ~~first moulded element (12)~~ is internally hollow and equipped in said recess (32) with at least one transversal wall (33), protruding at one end to form a gripper tab (34).

Claim 10 (currently amended) Cap according to claim [[1]] 5, ~~characterised in that~~ wherein said second ~~moulded~~ molded element which can be coupled with said first element (12) is a ring (13) with the same diameter as the collector.

Claim 11 (currently amended) Cap according to claim [[2]] 5, ~~characterised in that~~ wherein said third element (22) is ~~moulded~~ molded integral with a spacer shaft (30) suitable for being connected to a filtering cartridge.

Claim 12 (currently amended) Cap according to claim [[2]] 11, ~~characterised in that~~ wherein said third element (22) is equipped with an element (31) for connection to accessories.

Claim 13 (new) Cap according to claim 5, wherein said at least one portion with a smaller diameter (17, 21) than said portion (16) with the same diameter as the collector, forming said base of said at least one seat (15, 150) for a sealing ring (14) has a high surface finish.